

AlMg 3 Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Tig filler metal for welding Aluminium Magnesium alloys.

APPLICATIONS Suitable for base metals with maximum 3% Mg. These alloys are suitable for a big range of applications in the construction sector, in general, and in the structural industry. Widely used in ship and vessel building.

PROPERTIES This alloy offers excellent weldability when properly cleaned prior to welding. Heavy parts and thicker plates should be preheated (150°C), prior to welding. The alloy shows good corrosion-resistance and an excellent colour-uniformity after anodizing. AlMg3 offers also good resistance against seawater.

CLASSIFICATION

AWS	A 5.10: ER 5654
EN ISO	18273: S Al 5754-AlMg3
DIN: W.Nr.	3.3536
DIN	1732: SG-AlMg3

SUITABLE FOR Aluminium alloys: AlMg Mn, AlMg 3Mn, AlMg1, AlMg2, AlMg2,7Mn, AlMg3, AlMg3,5, AlMgSi0,5, AlMgSi0,8, G-AlMg3Si, 3.3315, 3.3535, 3.3206, 3.3541, EN AW 5005A, EN AW 5754, EN AW 6060, EN AC 51100, EN AW 5454, EN AW 5251

APPROVALS CE approved

WELDING POSITIONS:



ALL WELD DEPOSIT (WEIGHT %)

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	others
Rem	<0.4	<0.4	<0.1	<0.5	2.6-3.6	<0.3	<0.2	<0.15	<0.15

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				-20°C	-40°C	-60°C	
AW	>80	>190	>20				

AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters	Packing (kg)	
		single	master
1,6 x 1000	Current (A) AC	5	20
2.0 x 1000	25-50	5	20
2.4 x 1000	40-75	5	20
3.2 x 1000	90-130	5	20
4.0 x 1000	160-240	5	20
	290-340	5	20

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1, I3